

1054243



# PATENT SPECIFICATION

NO DRAWINGS

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## COMPLETE SPECIFICATION

### Bleaching and Disinfectant Preparation

We, WALLACE CAMERON & COMPANY LIMITED, a British Company, of 513, Shields Road, Glasgow, S.1., Scotland, do hereby declare the invention, for which we pray that a patent may be granted to us, and the method by which it is to be performed, to be particularly described in and by the following statement:—

This invention relates to a bleaching and disinfectant preparation.

It has previously been proposed to provide a germicidal preparation comprising a water-soluble metal iodide, and a compound which releases chlorine in the presence of water, e.g. chloramine T, together with one or more subsidiary materials, e.g. an effervescing agent, the preparation on addition to water dissolving therein, and the dissolved metal iodide and chlorine-releasing compound reacting to produce a germicidally effective aqueous solution of diatomic iodine and not an aqueous solution of chlorine as in the present invention.

According to the present invention we provide a bleaching and disinfectant preparation comprising a germicidal compound which yields chlorine on contact with water, and an effervescing agent, the preparation on addition to water effervescing and dissolving therein to produce an aqueous solution of chlorine.

Preferably, the germicidal compound is 1:3-dichloro-5:5-dimethylhydantoin.

Preferably, the effervescing agent is a mixture of an acyclic dicarboxylic acid and an alkali bicarbonate.

The preparation may be in tablet form. The germicidal compound is preferably contained in a water-soluble envelope which may take the form of a compressed coating of the effervescing agent or a sachet of water-soluble

synthetic resinous material such as polyvinyl alcohol.

In tablet form the preparation preferably contains a binder such as acacia.

Embodiments of the invention will now be described by way of example.

#### EXAMPLE 1

A bleaching and disinfectant preparation in tablet form and comprising an inner core of dry powder consisting of a mixture of dimethyldichloro hydantoin, tartaric acid and sodium bicarbonate. The powder core is enclosed in a coating consisting of a compressed mixture of tartaric acid, sodium bicarbonate and magnesium stearate to form a tablet. The tablet when immersed in water effervesces and liberates chlorine to form a germicidally effective solution of hypochlorite.

The composition of the tablet is as follows:—

Inner core:—	
1:3-dichloro-5:5-dimethyl hydantoin	135 mg.
Tartaric acid.	200 mg.
Sodium bicarbonate.	200 mg.
Coating:—	
Tartaric acid.	300 mg.
Sodium bicarbonate.	300 mg.
Magnesium Stearate.	20 mg.

#### EXAMPLE 2

A bleaching and disinfectant preparation in tablet form is as Example 1 but with a composition as follows:—

Inner Core:—	
1:3-dichloro-5:5-dimethyl Hydantoin	135 mgs.
Sodium bicarbonate	250 mgs.
Adipic acid	220 mgs.

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## Coating:—

	Sodium bicarbonate	840 mgs.
	Adipic acid	900 mgs.
	Acacia	45 mgs.
5	Stearic acid	15 mgs.

## EXAMPLE 3

10 A bleaching and disinfectant preparation comprises an inner core of dry powder containing dimethylchloro hydantoin, as in Example 1, enclosed in a water-soluble sachet of polyvinyl alcohol. When the preparation is immersed in water, the polyvinyl alcohol sachet dissolves and chlorine is liberated to form a solution of hypochlorous acid.

15 Thus the invention provides a bleaching and disinfectant preparation which is in a compact, dry form and which is simply thrown into water to form quickly an efficient bleaching and disinfectant solution.

## EXAMPLE 4

20 A bleaching and disinfectant preparation has an inner core as in Example 2, enclosed in a water-soluble sachet of polyvinyl alcohol as in Example 3.

## 25 WHAT WE CLAIM IS:—

1. A bleaching and disinfectant preparation comprising a germicidal compound which yields chlorine on contact with water, and an effervescing agent, the preparation on addition to water effervescing and dissolving therein to produce an aqueous solution of chlorine.

30 2. A preparation according to claim 1, wherein the germicidal compound is 1:3-dichloro-5:5-dimethylhydantoin.

35 3. A preparation according to claim 1 or 2, wherein the effervescing agent is a mixture of an acyclic dicarboxylic acid and an alkali metal bicarbonate.

4. A preparation according to claim 3,

wherein the effervescing agent is a mixture of tartaric acid and sodium bicarbonate. 40

5. A preparation according to claim 3, wherein the effervescing agent is a mixture of adipic acid and sodium bicarbonate.

6. A preparation according to any one of the preceding claims, in tablet form. 45

7. A preparation according to claim 6 including a binding agent.

8. A preparation according to claim 7, wherein the binding agent is acacia. 50

9. A preparation according to any one of the preceding claims, wherein the germicidal agent is contained in a water-soluble envelope.

10. A preparation according to claim 9, wherein the water soluble envelope is a compressed coating of the effervescing agent. 55

11. A preparation according to claim 10, wherein the water soluble envelope is a compressed mixture of tartaric acid, sodium bicarbonate and magnesium stearate. 60

12. A preparation according to claim 10, wherein the water-soluble envelope is a compressed mixture of adipic acid, sodium carbonate, acacia and stearic acid.

13. A preparation according to any one of claims 1 to 5 and 9, wherein the envelope is a catchet of a water soluble resinous material. 65

14. A preparation according to claim 13, wherein the sachet is of polyvinyl alcohol. 70

15. A bleaching and disinfectant preparation according to any one of Examples 1, 2, 3 or 4.

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